

## Original Research Article

# Assessment of knowledge, attitude and practice about menstruation and menstrual hygiene among adolescent girls in rural area of district Kathua, Jammu and Kashmir

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## ABSTRACT

**Background:** Good hygiene practices are very much needed during menstrual period. Adolescent girls especially in rural areas often lack information about good menstrual hygienic practices. Cultural beliefs about menstruation like food taboos, not going to the religious places also have a negative impact on the adolescent girls in the rural areas. This study was undertaken with an aim to evaluate the knowledge, attitude and practices of adolescent girls regarding menstruation and menstrual hygiene.

**Methods:** This cross-sectional study was conducted among adolescent girls from 8<sup>th</sup> to 12<sup>th</sup> class, from 5 schools of zone Budhi; which is a field practice area of department of community medicine, GMC Kathua; by simple random sampling technique. Out of total 323 girls, 300 girls willing to participate in the study (convenience sampling) were included. A semi-structured self-administered questionnaire was used.

**Results:** A total of 300 adolescent girls were enrolled in the study. Majority of adolescent girls had fair to good knowledge and practice scores regarding menstruation, menstrual hygiene and its management but poor attitude scores due to some cultural taboos like restrictions in kitchen, religious places etc.

**Conclusions:** Proper IEC activities need to be performed at school level and Anganwadi level to create awareness among adolescent girls regarding menstrual hygiene management so that they are able to make appropriate choices so that it enable them to lead a healthy life and prevent the girls from reproductive tract infections.

**Keywords:** Adolescents, Knowledge, Attitude and practices survey, Menstrual hygiene

## INTRODUCTION

Menstruation is a physiological process that starts with the onset of puberty in females.<sup>1</sup> The puberty starts in adolescence age group. According to WHO, adolescent is the phase between the 10-19 years of age.<sup>2</sup> Menstrual hygiene practices is always an important issue for all adolescent girls. Good menstrual hygiene practices include use of sanitary pads, its proper disposal and then

proper washing of the genital area and then hand wash. Lack of education and communication about good hygiene practices and reproductive problems further add to the problem.

And the unhygienic menstrual practices will increase the risk of reproductive health problems.<sup>3,4</sup> The unhygienic practices are further exacerbated by insufficient access to water, clean toilets and soap.<sup>5,6</sup> The practical challenges

are made more difficult by socio-cultural factors such as menstruation being considered as unclean, isolation of the menstruating girls etc.<sup>7</sup> Failure to provide menstrual hygiene facilities at home or at school level also decrease the level of having good menstrual hygiene practice among female students.<sup>8</sup> So, it is important to address such problems of adolescent girls which is overall important for their health. Also, awareness programmes are very important for promoting menstrual hygiene management (MHM) both at community as well as at school level.<sup>9,10</sup> Hence, this study was undertaken with an aim to evaluate knowledge, attitude, and practices (KAP) of adolescent girls regarding menstruation and menstrual hygiene and the level of awareness among them.

## METHODS

The present cross-sectional study was conducted among adolescent girls from 8<sup>th</sup> to 12<sup>th</sup> class at five Schools, from Zone Budhi, a field practice area of Department of Community Medicine, GMC Kathua from 1<sup>st</sup> April 2019 to 31<sup>st</sup> May 2019. Students were selected randomly by draw of lot method.

### Inclusion criteria

All the girls in the adolescent age group who were present on the data collection days were included in the study.

### Exclusion criteria

Not willing to participate.

After taking consent from the Block Medical Officer, Nagri Parole and from the school authorities, the study was initiated. Taking prevalence of satisfactory awareness about menstrual hygiene as 30% with 95% confidence level and a relative error of 5% 11, sample size came out to be 323. Out of the total 323 girls, 300 girls participated in the study (convenience sampling). The formula used was-

$$n = Z^2 \frac{pq}{L^2}$$

All the participants were briefed about the nature of the study and their consent was obtained. A valid, pretested, and reliable structured questionnaire was used to assess the knowledge, attitude, and practices about menstruation and menstrual hygiene among adolescent girls. Data including general data regarding religion, family type and mother's education was then recorded. The KAP Questionnaire pertaining to menstrual hygiene comprised of three parts. The first one had six sections which assessed the adolescent girl's knowledge about menstruation, causes of menstruation, menstrual hygiene, days of menstrual bleeding, about sanitary napkins, concept of menstrual blood and about whether they have ever heard of the term menstruation before menarche. The second part had five sections assessing the attitude towards their premenstrual symptoms, their restriction in

kitchen and religious places during menses days, bathing during the cycle and school attendance during menses days. The third part had six sections exploring practices which comprised of whether they use sanitary napkins or not, material used during menses days, number of times absorbent material is brought to use, method of disposal of absorbent material, whether they wash their hands after disposing off the absorbent material and wash their genitalia during menses.

The data was then entered and numbers and percentages were calculated using Microsoft Excel. We categorized adolescent girls KAP scores into three categories based on the percentage of maximum possible scores: 'poor' (0%-50%), 'fair' (51-75%) or 'good' (76-100%).

## RESULTS

Table 1 shows the distribution of sample characteristics in numbers and percentages.

**Table 1: Demographic characteristics of participants.**

Variables	N (%)
<b>Religion</b>	
Hindu	210 (70)
Muslim	48 (16)
Christian	5 (1.66)
Sikh	29 (9.66)
Others	8 (2.66)
<b>Family type</b>	
Joint family type	168 (56)
Nuclear family	132 (44)
<b>Mothers education</b>	
Illiterate	20 (6.66)
Middle pass	108 (36)
High school	96 (32)
12 <sup>th</sup> pass	20 (6.66)
Graduation	47 (15.66)

**Table 2: Distribution of knowledge scores among adolescent girls.**

Knowledge scores	N (%)
<b>Good</b>	174 (57.85)
<b>Fair</b>	35 (11.88)
<b>Poor</b>	91 (30.27)

**Table 3: Distribution of attitude scores among adolescent girls.**

Attitude scores	N (%)
<b>Good</b>	107 (35.5)
<b>Fair</b>	51 (17)
<b>Poor</b>	142 (47.5)

The knowledge scores revealed that 174 (57.85%) adolescents had good knowledge, 51 (17%) had fair

knowledge, and 91 (31.27%) adolescents had poor knowledge regarding menstruation and menstrual hygiene (Table 2). The attitude scores revealed that 107 (35.5%) adolescents had good attitude, 51 (17%) had fair attitude, and 142 (47.5%) adolescents had poor attitude regarding menstruation and menstrual hygiene (Table 3). The practice scores revealed that 179 (59.50%) adolescents had good practices, 49 (12.5%) adolescents had fair practices, and 72 (28%) adolescents had poor practices regarding menstruation and menstrual hygiene (Table 4).

**Table 4: Distribution of practices scores among adolescent girls.**

Practices scores	N (%)
<b>Good</b>	179 (59.50)
<b>Fair</b>	49 (12.5)
<b>Poor</b>	72 (28)

**Table 5: Age at menarche.**

Age at menarche (years)	Number of girls N (%)
<b>&lt;11</b>	2 (0.66)
<b>11-13</b>	179 (59.66)
<b>14-16</b>	110 (36.66)
<b>&gt;16</b>	9 (3)
<b>Total</b>	300

## DISCUSSION

Menstruation is one of the pubertal changes that occur in the girls in the adolescent age group. In our study, menarche was experienced in the age group of 11-13 years which is comparable to the Rajasthan study conducted by Khananna et al.<sup>12</sup> Maximum girls were from Hindu community (700%) and hailed from joint families (56%). Mothers of most of the adolescent girls were middle pass (36%).

In our study, 50.33% of the adolescent girls had good knowledge about menstruation and that it is a normal phenomenon which is considered low as compared to the other studies.<sup>13,14</sup> Our study showed that 191 (63.66%) had awareness about menstruation prior to menarche and similar observation also observed by other studies.<sup>15,16</sup> But in contradiction to this, they thought that impure blood comes out (54.33%). In our study, only 36.6% of girls have knowledge about the normal duration of menstrual flow and it was found to be low as reported by others.<sup>17</sup> Half of the girls had good knowledge about menstrual hygiene and 90% considered menstrual blood as unhygienic.

Some cultural taboos still exist like restriction in the kitchen, not to take pickles, barring entry into the religious places etc. This was also encountered in our study, as majority of the students faced same restrictions which are in line with the results of similar findings.<sup>18</sup> Hygienic menstrual absorbent materials help the females

to manage menstruation safely. In our study, majority of the girls knew the use of sanitary napkins (59.33%) which is a good practice to avoid unhygienic clothes, in contrast to the study conducted by Dasgupta.<sup>8</sup> But still some girls use the reused cloth (11%) whereas in a Mudey et al study, majority of girls used cloth and sanitary napkins were used by only 15.67% girls.<sup>19</sup> So proper awareness needs to be promoted at the school level only. The Anganwadi centers should also undertake the process of highlighting the importance of Menstrual hygienic practices.

One of the problems that is always faced by the adolescent girls in rural settings is how to dispose off the sanitary pads. In our study, 35% of the girls discard sanitary napkins or used cloth in open fields and 33% in the dustbin which was in contrast to one of the studies where the 57.5% girls disposed off the pad properly.<sup>8</sup> So awareness regarding the proper disposal needs to be addressed. Personal hygienic practices like hand-washing after using toilet and proper washing of genitalia during menses are very important in safeguarding oneself from all the infections. In our study, majority of the girls were washing their hands and genitalia during menses which was similar to other findings as well.<sup>20</sup>

Limitation of the study was this study is not free from limitations. Small sample size, absence of any of the intervention and non-exploration of KAP relationship with socio-economic status are there.

## CONCLUSION

Proper IEC activities need to be performed at school level and Anganwadi level to create awareness among adolescent girls regarding menstrual hygiene management so that they are able to make appropriate choices so that it enables them to lead a healthy life and prevent the girls from reproductive tract infections. We also need to educate the girls about the services which are provided by the government like free supply of sanitary napkins to overcome the reproductive tract infections.

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## REFERENCES

1. Archibald AB, Graber JA, Brooks Gunn J. Pubertal processes and physiological growth in adolescence. Blackwell Handbook of Adolescence. 2003: 24-47.
2. UNICEF I. Adolescence: an age of opportunity. New York; 2011:138.
3. Water Aid: Is Menstrual Hygiene and Management an issue for Adolescent Girls?. Water Aid in South Asia Publication; 2009:1(6).
4. Prajapati D, Shah JP, Kedia G. Menstrual hygiene: Knowledge and practice among adolescent girls of

- rural Kheda district. *Nat J Commu Med*. 2015;13(10):50.
5. Sara J, Fritz W. Meeting Women's needs and priorities for water and sanitation in cities. *Envir Urbaniz*. 1993;5(2):135-45.
  6. Issa M, McHenry M, Issa AA, Blackwood RA. Access to safe water and personal hygiene practices in the Kulandia Refugee Camp. *Infect Dis Rep*. 2015;7(4):22.
  7. Ninama R, Dund JV. Knowledge and Practice regarding menstrual hygiene among adolescent girls. *SJAMS*. 2015;3:2704-9.
  8. Dasgupta A, Sarkar M. Menstrual hygiene: How hygienic is the adolescent girl? *Indian J Comm Med*. 2008;33:77-80.
  9. Ndlovu E, Bhala E. Menstrual hygiene –a salient hazard in rural schools: a case of Masvingo district of Zimbabwe. *J Disaster Risk Stud*. 2016;8(2):18.
  10. Rizvi N, Ali TS. Misconceptions and mismanagement of menstruation among adolescents girls who do not attend school in Pakistan. *J Asian Midw*. 2016;3(1):46-62.
  11. Juyal R, Kandpal SD, Semwal J, Negi KS. Practices of menstrual hygiene among adolescent girls in a District of Uttarakhand. *Indian J Comm Health*. 2012;2:124-8.
  12. Khanna A, Goyal RS, Bhawsar R. Menstrual practices and reproductive problems: A study of adolescent girls in Rajasthan. *J Health Manag*. 2005;7(1):91-7.
  13. Sapkota D, Sharma D, Pokharel HP, Budhathoki SS, Khanal VK. Knowledge and practices regarding menstruation among school going adolescents of rural Nepal. *J Kathmandu Med Coll*. 2014;2(3):122-8.
  14. Crofts T, Fisher J. Menstrual hygiene in Ugandan schools: an investigation of low cost sanitary pads. *J Water Sanit Hyg Develop*. 2012;2(1):50-8.
  15. Thakre SB, Thakre SS, Reddy M, Rathi N, Pathak K, Ughade S. Menstruation hygiene: knowledge and practice among adolescent school girls of Saoner, Nagpur. *District J Clini Diag Res*. 2011;5(5):1027-33.
  16. Dube S, Sharma K. Knowledge, attitude and practice regarding reproductive health among urban and rural girls: a comparative study. *Ethno Med*. 2012;6(2):85-94.
  17. Vijayakeerthi R, Kalyani P, Felix AJW, Govindaranjan PK. A study on knowledge and practice of menstrual hygiene among menstruating women of age group 15-44 years in a rural area, Tamil Nadu. *JMSCR*. 2016;4(10):13264-70.
  18. Geeta P, Chenchuprasad C, Sathyavathi RB, Bharathi T, Reddy SK. Effect of Socioeconomic conditions and lifestyles on menstrual characteristics among rural women. *J Women's Health Care*. 2016;5:298.
  19. Mudey AB, Kesharwani N, Mudey GA, Goyal RC. A cross-sectional study on awareness regarding safe and hygienic practices amongst school going adolescent girls in rural area of Wardha district, India. *Global J Health Sci*. 2010;2:225-31.
  20. Patle RA, Kubde SS. Comparative study on menstrual hygiene in rural and urban adolescent. *Indian J Med Sci Pub Health*. 2014;3:129-32.

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